



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,995	11/26/2003	Takashi Suzuki	032038	6536
38834	7590	01/03/2006		
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			EXAMINER ADAMS, GREGORY W	
			ART UNIT	PAPER NUMBER
			3652	

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/721,995	Applicant(s) SUZUKI, TAKASHI	
	Examiner Gregory W. Adams	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-6 is rejected under 35 U.S.C. 102(b) as being anticipated by Adelson et al. (US 4,005,786).

With respect to claim 1, Adelson et al. disclose an overhead traveling carriages 1, running path 3, conveying means 13 that move a load horizontal (col. 4, Ins. 61-69), and buffers 5, having loading and unloading means 6.

With respect to claim 2, Adelson et al. disclose upper stations 80 having input and output means 81.

With respect to claim 3, Adelson et al. disclose ground stations and a hoist 26.

With respect to claim 4, Adelson et al. disclose buffers 5 and upper stations 80 opposite each other.

With respect to claims 5-6, Adelson et al. disclose ground stations below a running path, and a hoist 26.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, rejected under 35 U.S.C. 103(a) as being unpatentable over Shiwaku (US 6,183,184) (previously cited) in view of Minardi (US 6,450,318) and Hoffman (US 5,328,316).

With respect to claim 1, Shiwaku discloses an overhead traveling carriage 2, running path 1, conveying means 16, and hoist 3 but does not disclose a conveying means in a carriage or buffers.

Minardi discloses attaching a conveying means 30 to a carriage 10 such that in delivering a large amount of containers to and from stations 35 extra equipment, e.g. fork lift trucks, is eliminated and production capable floor space improves. Col. 1, Ins. 10-40. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shiwaku's carriage to include conveying means, as per the teachings of Minardi, to increase production capacity.

Hoffman discloses a carriage 14 that unloads horizontally into buffers 22 at a side of a running path 28 via conveying means 40. Hoffman teaches horizontally extracting of articles from a buffer, e.g. first selected location, and transfer into a station, e.g. second location. It is noted that Hoffman discloses an upper station across from a buffer station as shown in FIG. 2. Hoffman teaches that in conventional automatic storage and retrieval apparatus that horizontally service two storage areas, it is desirable load and unload buffers and stations via conveying means at power and time savings. Cols. 1-2. Therefore, it would have been obvious to one having ordinary skill in

Art Unit: 3652

the art at the time the invention was made to modify Shiwaku's carriage to horizontally load into buffers, as per the teachings of Hoffman, to save power and time.

With respect to claims 3 & 5-6, Shiwaku discloses a hoist 3 and a ground station P1, P2 below a running path 1.

Response to Arguments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 2003/0077159 to Iizuka et al. discloses a carriage that supports an article from underneath during transport.

US 5,570,990 to Bonora et al. discloses a carriage that horizontally loads and unloads with buffers and ground stations.

US 6,468,021 to Bonora et al. discloses horizontally conveying articles to upper stations and ground stations.

US 6,336,546 to Lorenz discloses a buffer/conveyor above a ground station.

US 6,089,811 to Watanabe et al. discloses buffers across from upper stations adjacent to running paths.

US 3,921,828 to Suizu discloses a carriage/hoist moving along buffers and stations wherein each has conveying means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (571) 272-8101. The examiner can normally be reached on M-Th, 8:30-6.

Art Unit: 3652

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GWA



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600